

Lane Construction Company)	DEPARTMENTAL
Penobscot County)	FINDINGS OF FACT AND ORDER
Hermon, Maine)	AIR EMISSION LICENSE
A-173-71-H-M/R)	

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Lane Construction Company (Lane) of Hermon, Maine has requested a renewal of their Air Emission License permitting the operation of emission sources associated with their portable asphalt plant.

B. Emission Equipment

Asphalt Plant:

<u>Equipment</u>	<u>Process Rate</u> ton/hr	<u>Heat Input</u> <u>Capacity</u>	<u>Firing</u> <u>rate</u>	<u>Control</u> <u>Devices</u>	<u>Stack ID</u>
Asphalt Plant	385	95 MMBtu/hr	696 gal/hr	baghouse	41

Diesel Units

<u>Source ID</u>	<u>Max Capacity</u>	<u>Max Firing Rate</u>	<u>Stack</u>
GenSet 1	3.9 MMBtu/hr	28.5 gal/hr	G1
Diesel Drive 2	6.0 MMBtu/hr	43.8 gal/hr	D2

Fuel Burning Unit

<u>Source ID</u>	<u>Max Capacity</u>	<u>Max Firing Rate</u>	<u>Stack</u>
AC Tank Heater	1.0 MMBtu/hr	7.1 gal/hr	AC 1

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C. Application Classification

The application for Lane does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a renewal of current licensed emissions units only. This application is classified as a minor source and has been processed as such.

II. BEST PRACTICAL TREATMENT

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations.

A. Asphalt Plant

The Dryer was manufactured in 1989 and is therefore subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities manufactured after June 11, 1973.

To meet BPT and NSPS requirements, emissions from the asphalt batching operation shall vent to a baghouse.

Fuel use in the asphalt plant shall not exceed 500,000 total gal/year (based on a 12 month rolling total) of #2 fuel oil with a sulfur content not to exceed 0.35% and, as a back-up fuel source, specification waste oil with a sulfur content not to exceed 0.7%.

BPT emission limits for Lane for the Asphalt Plant are the following:

PM – 0.03 grs/dscf (BPT)

SO₂ – combustion of 0.35% sulfur #2 fuel oil, or specification waste oil @ 0.7% sulfur. (Mass Balance)

NO_x – 0.055 lb/ton Hot Mix Asphalt (HMA) (AP-42)

CO – 0.13 lb/ton HMA (AP-42)

VOC – 0.032 lb/ton HMA (AP-42)

Opacity – Lane shall prevent visible emissions from the baghouse greater than 20% opacity on a six minute block average basis, except for two (2) six (6) minute averages in any 3-hour period

The licensed lb/hr emission limits are based on the BPT emission limits.

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In order to meet NSPS requirements, the performance of the baghouse shall be constantly monitored by either one of the following at all times the asphalt plant is operating:

1. PM detector - when the detector signals excessive PM concentrations in the exhaust stream, Lane shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification - when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.

In order to document maintenance of the baghouse, Lane shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance logs shall be located at the facility whenever the facility is in operation.

Fugitive emissions from the asphalt drum plant shall not exceed 20% opacity on a five minute block average in any one hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any 1-hour period pursuant to Chapter 101.

Petroleum contaminated soil processing cannot exceed 10,000 cubic yards per year without prior approval from the Department.

B. Diesel Units

The GenSet 1 is utilized primarily to power the asphalt plant while Diesel Drive 2 is utilized to power screens and conveyors. Total fuel use in the diesel units shall not exceed 120,000 gal/year of #2 fuel oil, based on a 12 month rolling total, with a maximum sulfur content of 0.35% by weight and is therefore considered to be receiving BPT.

A summary of BPT for GenSet 1 and Diesel Drive 2 is the following:

1. The GenSet 1 and Diesel Drive 2 units shall burn #2 fuel oil, with a maximum sulfur content not to exceed 0.35% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case, BPT is stricter. A sulfur content limit of 0.35% shall be used.
3. Chapter 103 regulates PM emission limits for GenSet 1 and Diesel Drive 2.
4. NO_x, CO, and VOC emission limits are based upon AP-42 data.
5. Visible emissions from the GenSet 1 and Diesel Drive 2 units shall not exceed 20% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.

C. Fuel Burning Unit

BPT for the AC tank heater shall be the following:

1. The AC tank heater unit shall burn #2 fuel oil, with a maximum sulfur content not to exceed 0.35% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case, BPT is stricter. A sulfur content limit of 0.35% shall be used.
3. Chapter 103 regulates PM emission limits for AC tank heater.
4. NO_x, CO, and VOC emission limits are based upon AP-42 data.
5. Visible emissions from the AC tank heater unit shall not exceed 20% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.

D. Stock Piles and Roadways:

BPT for all potential sources of fugitive PM emissions, including material stockpiles and unpaved roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, on a 3 minute block average basis.

E. Facility Emissions and Fuel Use Caps:

In order to run all fuel burning equipment from the same fuel tank, #2 fuel oil not exceeding 0.35% sulfur shall be used. Fuel use shall be limited to the following:

1. The asphalt plant is limited to 500,000 gal of #2 fuel oil with a maximum sulfur content of 0.35%.
2. As a back-up fuel source, Lane is permitted to burn specification waste oil in the asphalt plant, with a maximum sulfur content of 0.7%. When it is necessary to burn specification waste oil, a separate tank shall be brought on site.
3. The other fuel burning units are limited to 120,000 gal of #2 fuel oil with a maximum sulfur content of 0.35%. Emission rates are based on the following fuel breakdown derived from equipment firing rates:

GenSet 1 & Diesel Drive 2 – 109,000 gal/yr
AC Heater – 11,000 gal/yr

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Total Allowable Annual Emissions for the Facility
(used to calculate the annual license fee)

(Tons/Year)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Asphalt Plant	3.2	3.4	24.7*	7.8	18.4	4.5
Ac Heater	0.1	0.1	0.3	0.2	0.1	0.1
Other Units	0.9	0.9	2.7	32.9	7.1	2.6
Totals	4.2	4.2	27.7	40.9	25.6	7.2

* Sulfur Dioxide emissions are based on a worst case scenario of firing 100% specification waste oil in the asphalt plant.

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

<u>Pollutant</u>	<u>TPY</u>
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the above total facility emissions, Lane is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

will receive Best Practical Treatment,
will not violate applicable emission standards,
will not violate applicable ambient air quality standards in
conjunction with emissions from other sources.

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The Department hereby grants Air Emission License A-731-71-H-M/R, subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records, to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned

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changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a license or amendment shall not stay any condition of the license.

- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that

there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

- (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

Specific Contitions

(16) Asphalt Plant

- a. Emissions from the hot mix asphalt plant shall vent to a baghouse, and all components of the asphalt plant shall be maintained so as to prevent PM leaks.
- b. The performance of the baghouse shall be constantly monitored by either one of the following at all times the Dryer is operating:
 1. PM detector - when the detector signals excessive PM concentrations in the exhaust stream, Lane shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
 2. Personnel with a current EPA Method 9 visible emissions certification when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.
- c. To document maintenance of the baghouse, the licensee shall keep a maintenance log recording the date and location of all bag failures as well as

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all routine maintenance. The maintenance log shall be located at the facility whenever the facility is in operation.

- d. Opacity from the baghouse is limited to no greater than 20% based on a six (6) minute average, except for no more than two (2) six (6) minute averages in a 3-hour period.
- e. Emissions from the baghouse shall not exceed the following:

Pollutant	grs/dscf	lb/hr
PM	0.03	9.3
PM ₁₀	-	9.3
SO ₂	-	67.0
NO _x	-	21.2
CO	-	50.1
VOC	-	12.3

- f. The licensee shall not process more than 10,000 cubic yards of petroleum contaminated soils per calendar year without prior approval from the Department. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.
- g. The licensee is permitted to process soils contaminated with virgin oil.
- h. The licensee shall not process contaminated soils which are classified as hazardous waste or which have unknown contaminants.
- i. Lane shall demonstrate compliance with EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities and 40 CFR §60.8(a), and §60.7(a)(1), (2), (3), (b) and (f).
- j. In order to run all fuel burning equipment from the same fuel tank, #2 fuel oil not exceeding 0.35% sulfur shall be used.
- k. Lane shall maintain records for six years depicting the amount of fuel purchased (in gallons) and the sulfur content of the fuel.

(17) Diesel Units:

Emissions from the Diesel Units GenSet 1 and Diesel Drive 2 shall not exceed:

	GenSet 1	Diesel Drive 2
Pollutant	lb/hr	lb/hr
PM	0.5	0.7
PM ₁₀	0.5	0.7
SO ₂	1.4	2.2
NO _x	17.2	26.5
CO	3.7	5.7
VOC	1.4	2.1

GenSet 1 and Diesel Drive 2 shall not exceed 0.12 lb PM/MMBtu pursuant to Chapter 103.

Visible emissions from the each diesel unit shall not exceed 30% opacity on a six (6) minute block average basis except for no more than two (2) six (6) minute averages in a 3-hour period.

(18) Fuel Burning Unit

Emissions from the AC Heater shall not exceed:

	AC Heater
Pollutant	lb/hr
PM	0.1
PM ₁₀	0.1
SO ₂	0.4
NO _x	0.3
CO	0.1
VOC	0.1

Visible emissions from the AC tank heater unit shall not exceed 20% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.

(19) Fuel Cap Limits

Lane shall observe the following fuel use limits:

1. Asphalt plant – 500,000 gal #2 fuel oil @ 0.35% sulfur (12 month rolling total). As a back-up fuel, Lane is permitted to use specification waste oil @ 0.7% sulfur.
2. Other fuel burning units – 120,000 gal #2 fuel oil @ 0.35% sulfur (12 month rolling total).

In order to run all fuel burning equipment from the same fuel tank, #2 fuel oil not exceeding 0.35% sulfur shall be used. When necessary to burn specification waste oil, a separate tank shall be brought on site.

Lane shall maintain records for six years depicting amount of fuel purchased (in gallons) and the sulfur content of the fuel.

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(20) Stockpiles and Roadways

BPT for all potential sources of fugitive PM emissions, including material stockpiles and unpaved roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, on a 3 minute block average basis.

(21) Lane shall notify the Bureau of Air Quality, by a written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. Written notification shall also be made to the municipality where the equipment will be relocated to, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

(22) Lane shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

(23) Lane shall pay the annual air emission license fee within 30 days of **November 30th** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

(24) The term of this order shall be for five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 6/9/2003

Date of application acceptance: 6/16/2003

Date filed with the Board of Environmental Protection _____

This order prepared by Jonathan Voisine, Bureau of Air Quality.